

<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional) <b>82887/8473</b>			
<p>I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]</p> <p>on <u>February 8, 2007</u></p> <p>Signature <u>/scott j. menghini/</u></p> <p>Typed or printed name <u>Scott J. Menghini</u></p>		Application Number <b>10/687,352</b>			
		Filed <b>October 15, 2003</b>			
		First Named Inventor <b>Perez, Sergio</b>			
		Art Unit <b>2125</b>			
		Examiner <b>Cabrera, Zoila E.</b>			
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <table style="width: 100%; border: none;"><tr><td style="width: 50%; vertical-align: top; padding: 5px;"><p><input type="checkbox"/> applicant/inventor.</p><p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p><p><input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>42,880</u></p><p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p></td><td style="width: 50%; vertical-align: top; padding: 5px;"><p><u>/scott j. menghini/</u> Signature</p><p><u>Scott J. Menghini</u> Typed or printed name</p><p><u>(858) 552-1311</u> Telephone number</p><p><u>February 8, 2007</u> Date</p></td></tr></table> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>				<p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>42,880</u></p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p>	<p><u>/scott j. menghini/</u> Signature</p> <p><u>Scott J. Menghini</u> Typed or printed name</p> <p><u>(858) 552-1311</u> Telephone number</p> <p><u>February 8, 2007</u> Date</p>
<p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>42,880</u></p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p>	<p><u>/scott j. menghini/</u> Signature</p> <p><u>Scott J. Menghini</u> Typed or printed name</p> <p><u>(858) 552-1311</u> Telephone number</p> <p><u>February 8, 2007</u> Date</p>				
<p><input type="checkbox"/> *Total of _____ forms are submitted.</p>					

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

<p>Appln. No.: 10/687,352</p> <p>Applicants: Perez et al.</p> <p>Filed: October 15, 2003</p> <p>Title: OPEN ARCHITECTURE MODULARITY FOR IRRIGATION CONTROLLERS</p> <p>Examiner: Cabrera, Zoila E.</p> <p>Art Unit: 2125</p> <p>Confirm. No.: 7833</p> <p>Customer No.: 22242</p>	<p style="text-align: center;"><b><u>Certificate of Transmission</u></b></p> <p>I hereby certify that this correspondence is being electronically submitted via EFS-Web to the USPTO, the local date at the time of the electronic submission occurring on the date shown below:</p> <p>Feb. 8, 2007    <u>/scott j. menghini/</u>  Date                      Scott J. Menghini  Registration No. 42,880  Attorney for Applicant</p>
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**BRIEF IN SUPPORT OF PRE-APPEAL REQUEST FOR REVIEW**

Mail Stop: AF  
Hon. Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the Final Office Action mailed August 8, 2006 and the Advisory Action mailed December 18, 2006, please enter the following brief in support of the attached Pre-Appeal Request for Review. A Notice of Appeal is also submitted herewith.

Claims 1-3, 7-14 and 32-65 are rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,956,248 (Williams et al.) in view of U.S. Patent No. 6,230,089 (Lonn et al.). Claims 4-6 and 15 and 66 are rejected under 35 U.S.C. § 103(a) over Williams et al. and Lonn et al. in further view of U.S. Patent No. 5,602,728 (Madden et al.).

**I. Clear Error: No prima facie case of obviousness has been established even if Williams and Lonn are properly combined because not all limitations are met.**

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP 2143.03 "Distilling an invention down to the "gist" or "thrust" of an invention disregards the requirement of analyzing the subject matter "as a whole." MPEP 2141.02(II) The pending rejections do not show where the prior art teaches the following limitations even if the proposed combination of art is proper; thus, there is a clear error in the rejection.

Claims 1, 8, 44, 49 and 66: The rejections clearly fail to show that the prior art teaches "a control panel removably mounted to a rear cabinet portion and a back plane circuit board mounted to the rear cabinet portion", as variously recited. The rejection indicates that the controller housing 4 of Williams is removably mounted to a mounting bracket 6, but this mounting bracket is not mounted to a back plane circuit board.

Claims 1, 8, 44, 49, and 66: The rejections clearly fail to show that the prior art teaches "a base module removably mounted in the rear cabinet portion that is electrically coupled to the back plane circuit board and includes drivers and output switches" as variously recited. The base recited module is equated to the panel 18 of Williams; however, the panel 18 is a plastic cover and is not electrically coupled to any circuit board and does not including drivers and output switches.

Claims 1, 8, 32, 51 and 66: The rejections clearly fail to show that the prior art teaches "wherein the other of said plurality of discrete electrical output connector sets to which the expansion module is electrically coupled may be any one of said plurality of discrete electrical output connector sets capable of being coupled to a given expansion module independent of the electrical coupling of another expansion module to another of said plurality of discrete electrical output connector sets." That is, none of the art of record teaches a controller in which any one expansion module can be connected to any one connector set independent of whether another expansion module is connected to another connector set.

Claims 36-38 and 52-54: Similarly, the rejections fail to show that the prior art teaches the limitations of these dependent claims.

Claims 44, 49, 50, 60 and 66: The rejections clearly fail to show that the prior art

teaches “wherein the expansion module may be electrically coupled and decoupled with said back plane circuit board through the other of said plurality of discrete electrical output connector sets without removing power to the control panel.” That is, none of the art of record teaches a controller in which an expansion module can be coupled and decoupled with the back plane circuit board without removing power to the control panel.

Claims 40-41, 45-46 and 55-58: Similarly, the rejections fail to show that the prior art teaches the limitations of these dependent claims.

**II. Clear Error: No prima facie case of obviousness has been established because there is no motivation to modify Williams with the teaching of Lonn.**

With respect to all claims, Applicants assert that it is not obvious to modify the Williams controller to include a microcontroller in the expansion module according to the teaching of Lonn to render the claims obvious.

Williams teaches a simple irrigation controller 2 into which station modules 22 may be plugged. The station modules 22 provide additional outputs supervised by and under the control of the main microcontroller of the controller 2. Lonn discloses a turf maintenance system that allows communications between a primary controller (ECU) and a plurality of secondary controllers (ECUs) that each control various functions and features (e.g., a cutting controller, ground speed controller and a hydraulic fluid detector). While the primary and secondary controllers share information to operate more efficiently, *the primary controller does not necessarily dictate, control, or otherwise supervise the operation of the secondary controllers* (see col. 3, lines 23-27, emphasis added).

**Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so. MPEP 2143.01(I)** The *asserted* motivation for modifying the station modules of Williams to include a microprocessor such as provided in the ECUs of Lonn is that: it would provide a flexible control system wherein the primary and secondary controllers (or expansion modules) (1) *share information to operate more efficiently*, (2) the primary controller *does not necessarily dictate, control, or otherwise supervise the operation of the secondary controllers* (emphasis added). In contrast, (1) the station modules 22 of Williams

are not *controllers* like the secondary ECUs of Lonn and there is no need for the station modules 22 to share any information with the controller 2, they simply provide additional output connectors. In further contrast, (2) the main microcontroller of Williams *does directly control* the station modules 22. There is no suggestion or need that the Williams controller 2 should *not* dictate, control or supervise the station modules 22. Thus, no motivation is provided.

**Additionally, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious.**

**MPEP 2143.01(VI)** That is, the addition of a microcontroller for purposes of allowing the station modules and the controller 2 to share information and such that the controller 2 does not necessarily *dictate, control*, or otherwise *supervise* the station modules changes the principle of operation of the Williams controller. Instead of simply providing additional outputs, the station modules 22 would be capable of operation without control or supervision by the controller 2. Since the station modules 22 function to activate valves at the appropriate time and since the controller 2 stores and executes watering schedules, the station modules 22 *can not* operate without control by the controller 2. Therefore, for at least this reason, the claims are not rendered obvious.

**Furthermore, if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.** **MPEP 2143.01(V)** Adding microcontrollers to the station modules 22 to share information and so that the controller 2 does not necessarily *dictate, control*, or otherwise *supervise* the station modules would render the controller unsatisfactory for its intended purpose. That is, the controller 2 is specifically programmed with watering programs and controls and supervises the station modules 22 in order to implement the preprogrammed watering programs. If the controller 2 does not control or supervise the station modules, the controller 2 will not function as intended. Therefore, for at least this reason, no motivation has been provided.

**III. Clear Error: The Final Office Action and the Advisory Action maintain all rejections without addressing the substance of Applicants arguments.**

MPEP 707.07(f) states "[w]here the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it." Additionally, MPEP 707.07(f) states that in response to Applicants arguments, "[i]f it is the examiner's considered opinion that the asserted advantages are not sufficient to overcome the rejection(s) of record, he or she should state the reasons for his or her position in the record, preferably in the action following the assertion or argument relative to such advantages. By so doing the applicant will know that the asserted advantages have actually been considered by the examiner and, if appeal is taken, the Board of Patent Appeals and Interferences will also be advised."

In this case, responsive to Applicants arguments of *why* the stated support for the proposed combination of Williams and Lonn is erroneous according to established examination standards, the Advisory Action simply re-iterated the originally stated support without addressing why Applicants reasoning is believed to be incorrect. Additionally, responsive to Applicants arguments that not all limitations of many claims are present even if the proposed combination is made, the Advisory Action simply disagrees and says that all limitations are shown without indicating where or how they are shown. The Final Office Action similarly responded to the arguments advanced in Applicants response to the first non-final Office Action.

### **CONCLUSION**

Applicants respectfully submit that there is at least one clear error that would overcome the rejection of at least one claim; Applicants request that the final Office Action be withdrawn.

Dated: February 8, 2007

Respectfully submitted,

/scott j. menghini/

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